

What is claimed is:

1. A sharpener for blades with an edge and at least one edge facet comprising a
5 physical structure supporting at least one abrasive surface, a displaceable guiding plate
with an integral linear structural feature of said plate disposed toward one side of said
abrasive surface, and said feature providing sliding contact with a face of the blade to
establish the relative angle of the plane of the edge facet with the plane of said abrasive
surface at the point of mutual contact as the facet is guided into contact with said abrasive
10 surface.
2. A sharpener according to Claim 1 where said displaceable guiding plate is
displaceable in a direction nominally perpendicular to the axis of said linear structural
feature as the blade face is moved slidingly or in rolling contact with said structural
feature and the face remains parallel to the axis of the said linear structural feature.
- 15 3. A sharpener according to Claim 1 where said displaceable guiding plate is
displaceable in a direction that when displaced maintains the axis of said linear
structural feature parallel to the position of said axis before its displacement.
4. A sharpener according to Claim 1 where said displaceable guiding plate is
supported on said physical structure in part by roller bearings.
- 20 5. A sharpener according to Claim 1 where said displaceable guiding plate is
supported slidingly onto a vertical post mounted onto said physical structure and said
displaceable guiding plate has attached rollers that support at least a portion of the weight
of said plate as said rollers rest and ride on said physical structure.

6. A sharpener for blades with an a cutting edge and at least one edge facet, comprising a physical structure to which is attached at least one extended abrasive surface and a displaceable guiding plate mounted adjacent to the side of the face of said abrasive surface to orient the blade and maintain the angular relationship of the edge facet with the plane of said abrasive element as said blade is moved into contact with different areas of said extended abrasive surface.

7. A sharpener according to Claim 6 where a brush-like structure is mounted on or adjacent to said displaceable guiding plate and in a manner to contact surfaces of the blade while it is being sharpened and remove particulate abrasive and metal debris from the blade.

8. A sharpener according to Claim 6 where the surface contour of said extended abrasive surface is of a shape selected from the group consisting of planar, curved, irregularly shaped and multifaceted.

9. A sharpener according to Claim 6 where a roller is used as the guiding feature for the blade and a brush is positioned in contact with surface of said roller to remove particulate abrasive and other debris from said blade.

10. A sharpener for blades with an edge and at least one edge facet, comprising a physical structure to which is attached at least one extended abrasive surface and at least one displaceable guiding plate with an integral structure feature that provides linear or planar sliding or rolling contact with the face of the blade at a location on the face of said blade where the edge facet immediately adjacent to the blade face at said location is not simultaneously in contact with said abrasive surface to orient the blade and maintain the angular relationship of said edge facet with the plane of said extended abrasive surface.

11. A sharpener according to Claim 10 where at least one spring is attached to said displaceable knife guiding plate and to said physical structure to offer resistance to displacement of said knife guiding plate from a rest position and to provide a restoring force to return said plate to a rest position.
- 5 12. A sharpener according to Claim 11 where the spring force to displace or restore the displaceable knife guiding plate to its rest position is adjustable.
13. A sharpener for blades with an edge and at least one edge facet, comprising a physical structure supporting at least one extended abrasive surface member and supporting a displaceable knife guiding plate attached slidingly to a detachable post
- 10 mounted to said physical structure, and said guiding plate has attached bearings that support at least a portion of the weight of said displaceable plate as said bearings bear on the surface of said physical structure.
14. The sharpener of Claim 13 where at least one spring is attached to said displaceable knife guiding plate and to said post to offer resistance to displacement of
- 15 said knife guiding plate from a rest position and to provide a restoring force to return said plate to a rest position.
15. The sharpener of Claim 14 where said spring is a leaf type spring.
16. The sharpener of Claim 13 where said physical structure includes an integral compartment for storage of said displaceable knife guiding plate attached to said
- 20 detachable mounting post and at least one said extended abrasive surface member.
17. A sharpener for blades with an edge and at least one edge facet comprising a physical structure to support at least one extended abrasive surface member, a displaceable knife guiding plate and at least one guard for a hand holding or steadying

said structure that can, while the blade is being sharpened and without physically interfering with said abrasive surface member be positioned either in a down position nominally against the surface of said physical structure or raised to protect said hand.

18. A sharpener for blades with an edge and at least one edge facet comprising a physical structure to support a pair of extended abrasive members, said physical structure comprising a single box-like enclosure with a single removable bottom cover for the entire enclosure which can be removed to allow the pair of said abrasive members to be stored together in said single enclosure.

19. A sharpener according to Claim 18 comprising a displaceable knife guiding plate where said enclosure is sufficiently large to store said guiding plate together with said abrasive members in said single enclosure.

20. A sharpener according to Claim 18 comprising at least two hinged hand guards mounted on and recessed when in stored position into the surface of said box-like enclosure, where said guards may remain recessed in said stored position as said extended abrasive members are mounted onto said physical structure for sharpening the blades.

21. A sharpener for blades with a cutting edge and at least one edge facet comprising a physical structure supporting at least one extended abrasive surfaced structure by a socket in said physical structure, and the end of said abrasive surfaced structure being designed with a physical angular offset so that the angular inclination of the surface of said abrasive surfaced structure is changed as said structure is withdrawn from said socket, rotated and reinserted into said socket.

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